

IN THE CLAIMS:

Please amend claims 1, 10 and 19 as follows.

1. (Currently Amended) A cellular communication system including at least one cell, said cell comprising:

a coverage layer having a fixed coverage area; and

a capacity layer including a plurality of carriers, each carrier in the capacity layer having a dynamically variable coverage area.

2. (Previously Presented) A cellular communication system according to claim 1, wherein a power level of a carrier in a downlink of the coverage layer defines the coverage area of said cell.

3. (Original) A cellular communication system according to claim 2, wherein said power level is variable.

4. (Previously Presented) A cellular communication system according to claim 1, wherein a number of carriers in the capacity layer is variable.

5. (Original) A cellular communication system according to claim 4, wherein a power level of at least one carrier of said number of carriers in the capacity layer is variable.

6. (Previously Presented) A cellular communication system according to claim 1, wherein a total transmission power for a downlink is divided between the coverage layer and the capacity layer of said at least one cell in dependence on the coverage and capacity requirement of the system.

7. (Original) A cellular communication system according to claim 6, wherein power available for at least one of the coverage layer and the capacity layer is divided between carriers in the coverage layer and the capacity layer.

8. (Original) A cellular communication system according to claim 1, wherein the cellular communication system comprises a multi-carrier system.

9. (Original) A cellular communication system according to claim 1, wherein the cellular communication system comprises a single carrier system.

10. (Currently Amended) A method of configuring a cellular communication system, comprising:

determining a coverage layer for a cell, the coverage layer having a fixed coverage area; and

determining a capacity layer for the cell, the capacity layer including a plurality of carriers, each carrier in the capacity layer having a dynamically variable coverage area.

11. (Original) A method according to claim 10, further comprising:
defining the coverage of said cell based upon a power level of a carrier in the coverage layer.

12. (Previously Presented) A method according to claim 11, wherein the defining step further comprises defining said power level to be variable.

13. (Original) A method according to claim 10, further comprising:
providing a number of carriers in the capacity layer, wherein the number of carriers is variable.

14. (Previously Presented) A method according to claim 13, wherein the step of providing further comprises providing at least one carrier of said number of carriers having a power level in the capacity layer which is variable.

15. (Previously Presented) A method according to claim 10, further comprising:

dividing a total available power for a downlink between the coverage layer and the capacity layer in dependence on the coverage and capacity requirement of the system.

16. (Original) A method according to claim 15, further comprising:

adding a carrier in the capacity layer, the step of adding including selectively reducing a power of at least one carrier in the capacity layer.

17. (Original) A method according to claim 10, further comprising:

transferring a connection using a carrier in the capacity layer to a carrier in the coverage layer to increase coverage for said connection.

18. (Original) A method according to claim 10, further comprising:

transferring a connection using a carrier in the coverage layer to a carrier in the capacity layer to increase capacity of the cell.

19. (Currently Amended) A base station of a mobile communication system including at least one transmitter unit configured to transmit a carrier at a predetermined power level thereby defining a coverage area of a cell, and further configured to transmit

a variable number of carriers thereby defining, at least in part, a capacity of the cell,
wherein each of the variable number of carriers has a dynamically variable coverage area.

20. (Original) A base station according to claim 19, wherein power levels of a variable number of carriers depends upon a proximity of a mobile station associated with a carrier to a base station.

21. (Original) A base station according to claim 20, wherein a total power of the variable number of carriers comprises a predetermined power, and

wherein a portion of said predetermined power among the variable number of carriers is determined by a total number of carriers.

22. (Previously Presented) A base station according to claim 21, wherein the at least one transmitting unit is further configured to reduce power allocated to at least one carrier in response to an increase in the variable number of carriers.

23. (Previously Presented) A cellular communication system according to claim 5, wherein the said power level is variable in dependence on a position of a mobile station.

24. (Previously Presented) A method according to claim 14, further comprising varying the power level of a carrier in the capacity layer in dependence on a position of a mobile station.